

**ABSTRACT**

It has now been discovered that certain mutant forms of pro-urokinase ("pro-UK"), such as so-called pro-UK mutant "M5" (Lys<sup>300</sup> → His), perform in the manner of pro-UK in lysing "bad" blood clots (those clots that occlude blood vessels), while sparing hemostatic fibrin in the so-called "good" blood clots (those clots that seal wounds, e.g., after surgery or other tissue injury). Thus, these pro-UK mutants are excellent and safe thrombolytic agents. These advantages allow them to be used in a variety of new methods, devices, and compositions useful for thrombolysis and treating various cardiovascular disorders in clinical situations where administration of other known thrombolytic agents has been too risky or even contraindicated.